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UNITED STATES DEPARTMENT OF AGRICULTURE
Radio Service
OFFICE OF INFORMATION

HOMEMAKERS' CHAT MONDAY, JANUARY 13, 1940.

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SUBJECT: "MORE ABOUT KETTLES AND PANS." Information from the Office of Experiment Stations, U.S.D.A.

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How about getting better acquainted with your kettles and pans?

You may think you couldn't know your kettles and pans any better. You use them every day. They are old acquaintances.

But old acquaintance doesn't always mean close acquaintance. You'd be surprised how many housewives really don't know the kitchen tools they have been using every day for years. They haven't stopped to consider whether the size, and shape, and material of each utensil makes the cooking job easy, and brings the best results. But scientists at different State experiment stations have been studying these questions. And they can tell you some facts about your old friends in the kitchen you may not know.

For example, here's a little information on kettles and saucepans. Do you know which kettle in your kitchen does the best job of cooking, and is most economical of heat? According to scientists at the Oregon Experiment Station, it is the kettle with smooth, straight-up-and-down sides; rounded corners; and a flat, unpolished bottom, heavy enough not to warp easily with heat. And that kettle is probably made of aluminum, or stainless steel, or copper, because these metals are the best conductors of heat and do the most even cooking. Your enamelware kettles absorb heat quickly, but do not conduct it evenly. So food is more likely to scorch in enamelware. As for cast-iron and heat-proof glass, these materials heat slowly, and hold heat well, so are good for slow cooking.

The scientists find that straight-up-and-down sides are more economical of heat and cook the food in the kettle more evenly than flaring sides. They also find that the bottom of a kettle must be somewhat thick or it will warp with heat, and then be likely to scorch food and cook unevenly. You may be interested to know also that a dull finish on the bottom of the kettle absorbs heat--that is, draws heat into the kettle while a shiny finish reflects heat or turns it off.

The lid of the kettle is important, too, for economical and even cooking. The best lid is the one that fits tightly and is heavy enough to stay in place on the kettle.

Other features that make a kettle convenient and efficient are: firm, smooth, heat-proof handles that are easy to keep clean; and lips or spouts on both sides of the kettle so you can pour from either side.

Now let's turn from kettles to frying pans. The scientists at the Oregon Station estimate that the average farm family needs about 3 frying pans of different sizes. They suggest one big 12-inch pan (with a cover to fit) to use for frying meat, fish, eggs, potatoes and so on for the whole family. They also suggest a double skillet, 10 inches across, for frying chicken and cooking pot roast. Then you will need a smaller frying pan, 8 inches wide, for cooking smaller amounts of food.

The frying pan that does the best job is thick and heavy enough to keep from warping with heat, yet not to heavy to handle comfortably. Unless a frying pan is flat on the bottom it cannot cook evenly. The materials the scientists recommend for frying pans are: heavy aluminum; cast-iron; and chromium-plated copper. Cast-iron is an old favorite because it is inexpensive, durable, and good for long slow cooking. But cast-iron has the disadvantage of being very heavy to lift.

The care you give a frying pan has much to do with the service it gives you. Always heat the pan gradually and cool it gradually. If you pour cold water into

a very hot pan, you can expect it to get warped and tipsy, to scorch food in one place and not cook it enough in another.

So much for your frying pans. Now here's a note on griddles. The scientists find that a round griddle is easier to keep uniform in temperature than an oblong or oval griddle.

From griddles, let's go on to the utensils you use in the oven--cake and pie pans, cookie sheets, and baking dishes.

Did you know that you need a slower oven for baking food in glass, enamelware and oven china than for baking in aluminum or tin? The Maine Station reports that cake in a glass pan needs less heat to bake well than the same cake in an aluminum or tin pan.

Here's another point about pans for baking. A dull finish on a pan or baking dish is better than a bright shiny finish. A dull finish helps the pan absorb heat. So never shine your pie or cake tins. Aluminum and tin are the materials recommended for cake and also pie pans because they heat so quickly. You can also bake cake and pie in glass. Just remember to have the oven slower.

For roasting meat, aluminum, iron, or steel pans are all good. The scientists report that the way you roast meat is more important than the material of the roasting pan. The modern way to roast tender meat is on a rack in an open pan rather than in the old-fashioned covered roaster.

Here's a note for cookie-makers. A baking sheet without sides bakes cookies better than a pan because it allows the heat to reach the cookies more evenly. And an aluminum sheet bakes best; iron and tin sheets next best.

Now for one last point--this one about casserole dishes, baked beans, and other slow-cooked foods. For these choose earthenware and glass. They hold heat well.

Perhaps these notes from different State experiment stations will help you get better service from your pots and pans.